AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A method of protecting an actuator against failure, comprising ~~the following steps~~:

[[-]] establishing a norm ~~(206)~~ of factors affecting [[the]]an operation of the actuator ~~(201)~~ as based on [[the]] an operating environment ~~(301)~~ of the actuator[[,]];

[[-]] providing the norm ~~(206)~~ with a tolerance defining a condition for the operation of the actuator ~~(201)~~ in the operating environment ~~(301),~~;

[[-]] observing the operating environment ~~(301)~~ of the actuator ~~(201)~~ in order to detect a deviation that falls outside said tolerance, the observation being performed by ~~means of~~ an environmental fuse ~~(220) having~~comprising a sensor member ~~(204)~~ with a first connecting surface ~~(401)~~ and a second connecting surface ~~(402)~~ for feeding a flux through ~~them,~~ an active layer ~~(403) therebetween which is~~ disposed between the first connecting surface and the second connecting surface, wherein the active later is arranged to cause a change in the flux's passing through the active layer ~~(403)~~ when

~~**characterized** in that the method comprises the following steps~~

cumulatively subjecting the active layer ~~(403)~~ to a component present in the operating environment ~~(301)~~, and

[[-]] limiting and/or interrupting a supply ~~(203)~~ to the actuator ~~(201), in order to keep this in working order, in condition that~~when said deviation falls outside said ~~condition~~ tolerance for the operation.

2. (Currently amended) A method as defined in Claim 1, ~~**characterized** in that~~wherein the method further comprises ~~the step of~~ generating an excitation signal by ~~means of~~ said sensor member ~~(204)~~.

3. (Currently amended) A method as defined in Claim 1, ~~**characterized** in that~~ wherein the method further comprises generating [[of]] a response by ~~means of~~ a functional member ~~(204)~~ of the environmental fuse ~~(202)~~, in response to an excitation signal.

4. (Currently amended) A method as defined in Claim 3, ~~characterized in that~~ wherein said response comprises a function in which the supply ~~(203)~~ to the actuator ~~(201)~~ is limited and/or interrupted.

5. (Currently amended) A method as defined in Claim 3, ~~characterized in that~~ wherein said response comprises an alarm function ~~(409)~~.

6. (Currently amended) A maintenance server ~~(901)~~, ~~characterized in that it has means for processing, storing~~comprising a block configured to process and store information concerning an alarm from an environmental fuse and/or for generating a response in order to limit and/or interrupt the supply to that actuator whose environmental fuse is the source of the alarm, wherein said environmental fuse ~~(220)~~ has a sensor member ~~(204)~~ with a first connecting surface ~~(401)~~ and a second connecting surface ~~(402)~~ for feeding a flux through ~~them,~~ an active layer ~~(403) therebetween which is~~disposed between the first and second connecting surfaces, wherein the active layer is arranged to cause a change in the flux's passing through the active layer ~~(403)~~ when cumulatively subjected to a component present in the operating environment ~~(301)~~, and ~~means for~~a block configured to limit and/or interrupt ~~limiting and/or interrupting~~ a supply ~~(203)~~ to the actuator ~~(201)~~, in order to keep ~~this~~the actuator in a working order.

7. (Currently amended) A maintenance server ~~(901)~~ as defined in Claim 6, ~~characterized in that it is implemented with software means~~comprising software as an implementation.

8. (Currently amended) A maintenance server ~~(901)~~ as defined in Claim 6, ~~characterized in that it has means for reporting~~ comprising a block configured to report alarm information to a data network.

9. (Currently amended) A maintenance server ~~(901)~~ as defined in Claim 8, ~~characterized in that~~ wherein said data network comprises one or a combination of the following: Internet, a local network, and a network based on a cellular system ~~and/or combination of some of these~~.

10. (Currently amended) An environmental fuse ~~(202)~~ for protecting an actuator ~~(201)~~ against failure, the environmental fuse ~~(202) having~~comprising a sensor member ~~(204)~~ to detect a change that occurs in an environment ~~(301)~~ and deviates from a tolerance according to a norm ~~(206)~~, and a functional member ~~(205)~~ having ~~functional means (408) to limit,~~ a block configured to limit or interrupt the supply ~~(203)~~ to the said actuator ~~(201)~~ and/or to give an alarm ~~(409)~~, said environmental fuse ~~being characterized in that the environmental fuse has~~further comprising a sensor member ~~(204)~~ having a first connecting surface ~~(401)~~ and a second connecting surface ~~(402)~~ for feeding a flux ~~them,~~ an active layer ~~(403) therebetween~~ disposed between the first and second connecting surfaces, wherein the active layer is configured~~which is arranged~~ to cause a change in the flux's passing through the active layer ~~(403)~~ when cumulatively subjected to a component present in the operating environment ~~(301)~~.

11. (Currently amended) An environmental fuse ~~(202)~~ as defined in Claim 10, ~~characterized in that it comprises~~ further comprising a collecting arrangement for collecting a component present in the composition of the environment ~~(301)~~.

12. (Currently amended) An environmental fuse ~~(202)~~ as defined in Claim 11, ~~characterized in that~~ wherein said collecting arrangement is based on the collection of a component present in the environment ~~(301)~~ on a substrate through diffusion, electrical interaction, impaction, interception, filtering and/or deposition.

13. (Currently amended) An environmental fuse ~~(202)~~ as defined in Claim 11, ~~characterized in that~~ wherein the collecting arrangement ~~has~~ comprises a collecting substrate comprising a wire, strip, dielectric substrate, conductive substrate and/or filter.

14. (Currently amended) An environmental fuse ~~(202)~~ as defined in Claim 10, ~~characterized in that~~ wherein the sensor member ~~(204)~~ is ~~arranged~~configured to detect particulate material, gas and/or moisture.

15. (Currently amended) An environmental fuse as defined in Claim 10, ~~characterized in that said flux is~~ wherein said flux comprises a flux of electric current.

16. (Currently amended) An environmental fuse ~~(202)~~ as defined in Claim 10, ~~characterized in that~~ wherein the change in said flux's passing is based on a change of the opacity of a medium and/or an interface thereof.

17. (Currently amended) An environmental fuse ~~(202)~~ as defined in Claim 16, ~~characterized in that said flux is~~wherein said flux comprises a flux of radiation.

18. (Currently amended) An environmental fuse ~~(202)~~ as defined in Claim 10, ~~characterized in that~~ wherein said actuator ~~(201) is the~~comprises a controller of another actuator.

19. (Currently amended) An environmental fuse ~~(202)~~ as defined in Claim 10, ~~characterized in that~~ wherein the environmental fuse ~~(202) has~~comprises:

[[-]] a first component ~~(E1)~~ of the sensor member ~~(204)~~ to detect a first change that occurs in the environment ~~(301)~~ and deviates from a first tolerance according to a norm ~~(206)~~, and

[[-]] a second component ~~(E2)~~ of the sensor member ~~(204)~~ to detect a second change that occurs in the environment ~~(301)~~ and deviates from a second tolerance according to a norm ~~(206)~~.

20. (Currently amended) An environmental fuse ~~(202)~~ as defined in Claim 19, ~~**characterized in that**~~ wherein said first component~~(E1)~~ and second ~~(E2)~~ component ~~(E1, E2)~~ of the sensor member ~~(204)~~ are integrated into an integrated sensor member.

21. (Currently amended) An environmental fuse ~~(202)~~ as defined in Claim 10, ~~**characterized in that**~~ wherein the environmental ~~fuse has~~fuse comprises:

[[-]] a first functional member ~~having functional means~~configured to limit and/or[[,]] interrupt a first part of the supply to the actuator to be protected and/or to give an alarm, and

[[-]] a second functional member ~~having functional means~~configured to limit and/or[[,]] interrupt a second part of the supply to the actuator to be protected and/or to give an alarm.

22. (Currently amended) An environmental fuse ~~(202)~~ as defined in Claim 10, ~~**characterized in that**~~ wherein the environmental fuse ~~(202)~~ has a modular component to be replaced with another similar component.

23. (Currently amended) An environmental fuse ~~(202)~~ as defined in Claim 22, ~~**characterized in that the**~~ wherein the modular component of the environmental ~~fuse~~ fuse ~~(202)~~ comprises the sensor member.

24. (Currently amended) An environmental fuse ~~(202)~~ as defined in Claim 10, ~~**characterized in that**~~ wherein the environmental fuse comprises a memory for storing one or more of an environment, actuator, norm, ~~and/or~~and a quantity value dependent on the state of the environment.

25. (Currently amended) An environmental fuse ~~(202)~~ as defined in Claim 10, ~~**characterized in that**~~ wherein the environmental fuse comprises one or more of a memory for authenticating an environment, actuator, norm, ~~and/or~~ and a quantity value dependent on the state of the environment.

26. (Currently amended) An environmental fuse ~~(202)~~ as defined in Claim 10, ~~**characterized in that**~~ wherein the sensor member ~~(204)~~ of the environmental fuse ~~(202) has~~ comprises an active layer ~~(403, E3)~~ having one or more of a capacitance, an inductance, ~~and/or~~and a resistance.

27. (Currently amended) An environmental fuse ~~(202)~~ as defined in Claim 26, ~~**characterized in that**~~wherein said active layer ~~(403, E3) forms~~ is configured to form part of a measuring bridge.

28. (Currently amended) An actuator ~~(201)~~, ~~**characterized in that**~~ wherein the actuator ~~has an~~comprises the environmental fuse ~~(202)~~ according to Claim 10.

29. (Currently amended) An actuator ~~(201)~~ as defined in Claim 28, ~~**characterized in that it has**~~further comprising one or more of an electric drive, power supply, drive controller, pump, and fan ~~and/or a preferred combination of these~~.